

UJ4SC075018B7S

750V 18mO Normally-Off Gen4 SiCFET in D2PAK-7L

Qualification Description:	AEC-Q101 Rev E
Package Type:	D2PAK-7L
Process Technology:	SiC, Si
Date Issued:	11/20/2023
Document Number:	UJ4SC075018B7S-PQ030 rev A

TEST NAME	TEST STANDARD AND CONDITIONS	# SAMPLES x # LOTS	TEST RESULTS
Moisture Sensitivity Level (MSL)	IPC/JEDEC J-STD-020: Classification Temperature $T_c = 245^{\circ}\text{C}$	77pcs x 3 lots x 4 tests	MSL 1
High Temperature Gate Bias (HTGB)	JESD22-A108: $T_J = 175^{\circ}\text{C}$, $V_{GS} = +20\text{V}$, 1000 hrs	77pcs x 3 lots	Pass
High Temperature Reverse Bias (HTRB)	MIL-STD-750-1 M1038 Method A: $T_J = 175^{\circ}\text{C}$, $V_{DS} = 80\% V_{DS, MAX} = 960\text{V}$ 1000 hrs	77pcs x 3 lots	Pass
High Humidity, High Temperature Reverse Bias (H3TRB) [†]	JESD22-A101C: $T_A = 85^{\circ}\text{C}$, 85% RH, $V_{GS} = 0\text{V}$, $V_{DS} = 100\text{V}$, 1000 hrs <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots	Pass
Autoclave/Pressure Cooker Test (AC/PCT) [†]	JESD22-A102: 121°C , RH = 100%, 96 hrs, 15psig <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots	Pass
Temperature Cycling (TC) [†]	JESD22-A104: 1000 cycles, -55°C to $+150^{\circ}\text{C}$, 2 cycles/hour, <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots	Pass
Intermittent Operating Life (IOL) [†]	MIL-STD-750 Method 1037: $\Delta T_J \geq 125^{\circ}\text{C}$, 3000 cycles (5 minutes on/ 5 minutes off) <i>Preconditioned to MSL 1 per JESD22-A113</i>	77pcs x 3 lots	Pass
Conclusion	This part meets Qorvo's product qualification requirements for AEC-Q101 Rev E.		

[†]: Test samples subjected to MSL Preconditioning

Qualification Samples:

UJ4SC075009B7S – 3 Lot

Products Qualified by Similarity:

UJ4SC075011B7S

UJ4SC075018B7S